

**METHODS FOR PATTERNING PLATINUM
AND STRUCTURES/METHODS USING SAME**

Abstract of the Invention

5

sub b1

10

15

The present invention provides a method for forming a discontinuous conductive layer in the fabrication of integrated circuits. The method includes providing a substrate assembly having a surface including at least one metal-containing adhesion region separated by at least one surface region of the substrate assembly. A conductive metal layer is formed on the surface of the substrate assembly. The substrate assembly including the conductive metal layer thereon is then annealed. Any nonadhered conductive metal is removed from the at least one exposed surface region to form a discontinuous conductive metal layer on at least one metal-containing adhesion region, for example, by simply rising the substrate assembly in water. The conductive metal layer can be platinum or ruthenium.

"EXPRESS MAIL" MAILING LABEL NUMBER: EL776900649US

DATE OF DEPOSIT March 19, 2001
I HEREBY CERTIFY THAT THIS PAPER OR FEE IS BEING DEPOSITED WITH THE
UNITED STATES POSTAL SERVICE "EXPRESS MAIL POST OFFICE TO ADDRESSEE"
SERVICE UNDER 37 CFR 1.10 ON THE DATE INDICATED ABOVE AND IS ADDRESSED TO
THE ASSISTANT COMMISSIONER FOR PATENTS
WASHINGTON, D.C. 20591

PRINTED NAME Louise M. Guggisberg

SIGNATURE *Louise M. Guggisberg*